EDITORIAL NOTES.

The Statistical Tables of Contagious Diseases of Animals published by the Agricultural Department of the Privy Council Office show the comparative prevalence of Glanders and Farcy in Great Britain. The total number of horses attacked during the year in England, Scotland, and Wales is returned as 1,482 for both forms of disease. Nearly the whole of these cases were found in London and the surrounding counties. The metropolis with Middlesex, Essex, Surrey, and Kent returned 1,402 cases, leaving only 80 for the rest of the Kingdom, and about half of these are traceable to Glasgow.

The Local Authority is certainly not to blame for this state of things. Nowhere is glanders looked after so carefully as in the Metropolis. The blame rests entirely upon the law which allows farcy to be treated as long as the patient is placed in so-called "isolation." Scores of these cases are treated and *apparently* cured only to be sold, and then infect other studs.

Can nothing be done to stop this dreadful waste of horse flesh? If any other contagious disease, provided for by the Act, were shown to be almost entirely confined to one part of the country, we have no doubt the Government would be pressed to adopt some extraordinary measures to prevent its spread and stamp it out. Glanders is unfortunately a disease of horses, and no one seems to interest themselves in that animal as they do in other species. Animals that afford food for man soon find friends; animals that afford fun for man also have no lack of protectors, but the horse, who only labours for us, has to suffer and die with merely the occasional sympathy of the few who understand him the least. The apathy of horse owners is simply astounding. Annually we permit one disease to kill more horses than would suffice to supply all the remounts required by the British Army. We know how this disease arises and how it spreads. We know that it is practically confined to one district. We know that it can be stamped out, and how to do it, and yet no influential body, no representative man, takes the question up. Under a representative Government we never expect the executive to initiate home reforms until the public shows some sign of interest. The diseases of horses seem to interest no one outside of the veterinary profession, and our body is not powerful enough to influence action unless supported by the horse-owners and the press. Such support must be sought for.

The disciplinary powers exercised by the Medical Council for the good of the sister-profession are not wanting to our Council. In saying this we by no means wish to suggest that they ought to be put in force more vigorously than they are. We question very much the expediency of Corporate action which makes it possible for an individual to pose as a martyr. The general public has a suspicion of all corporate bodies—very seldom thanking or rewarding them, but always ready to credit them with tyranny or stupidity. Nevertheless it is the duty of a profession to consider the well-being of the whole body before that of any individual member, and it may at times be necessary for the sake of discipline to correct "an erring brother."

The "Veterinary Surgeons' Act" empowers the Council to remove from the Register the name of any person who shall have been convicted of a "misdemeanour or higher offence." This power has been used. But the act goes on to say that the name of any person may be removed who has been guilty "of any conduct disgraceful to him in a professional respect." This language is wide-enough to cover many actions of which a court of law would take no cognisance, and some which perhaps an ordinary mind, not prejudiced by the conventionalities of professional etiquette, might fail to consider "disgraceful." The proceedings for the removal of a name from the Register are simple. The Council appoint a Committee to consider the alleged offence, and the report of the Committee shall be "conclusive as to the facts." Upon this the Council judge the victim who, however, has an appeal to the Privy Council.

Our object in drawing attention to these powers is not to propose the exercise of them, but to ask the profession to try and define what is, and what is not, "disgraceful professional conduct." The constant increase of our members with the inevitable pressure of competition that will soon render more arduous the struggle for existence, is certain to blunt the feelings of some of our greedier, weaker, or poorer members. Before the Veterinary Surgeons' Act was passed, a practitioner could exist nearly as well without as with a diploma. Now it is not so. The man who is unregistered has a very uphill task, and he will, undoubtedly when possible, endeavour to protect himself under cover of being assistant to, or partner with, some man whose name is on the register, and who thus may use the word "Veterinary." The offence of "Covering" will probably be one that will soon require attention.

Our profession is still young—it is ambitious and aims at a higher standard of social and professional rank. If this is to be attained we shall have undoubtedly to adapt ourselves to the usages of a higher standard. Stockbrokers forbid their members to advertise, Solicitors are not allowed to "tout" for business, Doctors object to the use of circulars and cards by men once established, Clergymen are punished for drunkenness and immorality, Where are we to draw the line? and say—to the man accused of "disgraceful professional conduct" when he pleads "I must live"—Not in that way.

ARTICLES AND CASES.

"PHYSIOLOGY OF ROARING."

By Thomas Greaves, F.R.C.V.S.

Ever since Mr. Hopkin introduced the subject last March before the Lancashire Association, I have made a special study of the matter. I have not only perused many writers, but have also gone often to the knackers' yards and made careful examinations of the larynx and the recurrent nerves of a large number of horses. Some of these horses were bad roarers, some of them were not roarers, in every case tested before death. Some of them were old, some young, some of them were heavy draught horses, others light bred horses; in every case the examinations were made immediately after they had been knocked down.

In these examinations I have observed certain conditions which it would seem have escaped the observations of other anatomists, at all events, I have failed to find in any writers or speakers, any allusion to it in the slightest degree whatever. The condition of which I speak is this: In every case in which the usual defective condition of the muscles of the left side of the larynx exists, the recurrent nerve on that side either has no connection with the larynx whatever, or else the nerve is in such an attenuated condition as to be unable to afford any nervous influence or power. I have found in some of the cases the fibres of the recurrent nerve on that side separate into three or more; these disperse in the cellular membrane—they positively vanish, and I am satisfied there is not a vestige of nervous fibre approaches nearer than six or eight inches to the larynx on that side: and further I am fully satisfied that these conditions have always been so, that the nerve on this side never had been in connection with the larynx. In other cases where the muscles were as usual wasted and blanched, I found the recurrent nerve on that side was like unto a thin thread instead of being like a crow-quill. It seemed to have no nature in it, it would break on the slightest tension, as if it were rotten, instead of being as strong as whipcord, and further I am strongly of opinion that this state had always been so. I found in every case, where the muscles of the right side of the larynx were in their normal condition, the recurrent nerve of that side was as thick as a crow quill, and as strong as whipcord, the same as was the case in the recurrent nerve on both sides in horses that were not roarers, and where the muscles of the larynx were plump and in full vigour.

I have pondered over this matter a good deal, and have come to the following conclusions:—

1st.—That this defective condition of the recurrent nerve occurs at the time of copulation, the die is cast then, and has been in this state from the earliest period of utero gestation.

2nd.—That the wasted, blanched condition of the muscles of the larynx had not always been in that state, *but at birth they were perfect;* it must be remembered that up to the time of birth these muscles were never put into action, that they obeyed the laws of growth simply, acquiring no more force to put them into action, and such condition might be no detriment until after birth.

The questions arise, when do these muscles change into this blanched, wasted, helpless condition? What are the causes acting at the time? Is it weeks, months, or years after birth? On this point all writers are silent, our knowledge is at fault; but this we do know, that a horse may be to all appearances perfectly sound in his wind at one period of his life, and at another period of life he has become a hopeless roarer, although he has not had one day's sickness, or the slightest sore throat in the meantime. Does not this look like an inevitable condition, a natural process or occurrence? My conviction is that no human aid or skill can alter it, that is, can make the nerve elongate, or become plump and well-conditioned, nor restore the muscles to their pristine vigour. There is a special condition, or species of roaring called "Bellones, which is, I have no doubt, a state similar to the above, but in which it is quite possible both recurrent nerves are affected, and the muscles of both sides of the larynx are alike affected. Some of these cases may enjoy perfect health, but on the slightest exertion, aye in some cases if you only go and stand up by their side they begin to make a noise in their breathing, and if you continue to stand by them the noise becomes greater and greater until it sounds like the strokes of a saw going through a deal board, and the spasm, or obstruction becomes so great that he will suffocate and rush forward against the wall and die unless you at once open the trachea, when relief is instantaneous, proving incontestibly that the difficulty exists in the larynx. I can understand this new operation which some call an experiment, and others call mutilation, viz., the removal of the vocal chord and crico-arytenoid cartilage, being an artificial remedy consequent on giving free passage to respiration, the success of which is a consummation devoutly to be wished.

There are those who advance the opinion that the seat of roaring is not in the larynx at all, I think the plain common sense evidence is dead against them. In my opinion it is in nearly every case simply and purely attributable to relaxed state, a total loss of power in the muscular fibres of certain muscles in one or both sides of the larynx; and this again is consequent on an absence of nervous influence. The condition of the vocal cords and the lining membrane is always found in its normal healthy condition. I can concieve as a result of the removal of the vocal ligament and cricoid cartilage, that after a certain period the larynx must fall in or collapse more or less, and therefore the end of such a case will be worse than the first.

[Some difference of opinion has arisen as to the originality of various ideas and suggestions in connection with the larynx. About Mr. Greaves' anatomy and physiology there can be no such quarrelling—it is absolutely original. Possibly its correctness may be doubted.—Ed.]

PARASITES IN FOWLS.

By Morris Grant Byerley, M.R.C.V.S.

The following remarks have reference to the result of an inquiry respecting the cause of death of some fowls.

Although kept under the best hygienic conditions, several had died in, what seemed to the owner, a very mysterious manner.

Death was, as far as could be ascertained, preceded by one or more convulsive fits.

Two of the birds were submitted to a careful examination; and, in both cases, the cæca were inflamed, but all the other organs were in a healthy state.

Among the alimentary matter, contained in the parts of the intestine named, were discovered a number of small entozoa, varying from $\frac{1}{4}$ to $\frac{3}{8}$ of an inch in length, of a whitish colour, and possessing tails drawn out to a point.

When examined microscopically, it was found that they belonged to the family Strongylidæ: the males and females being in about equal numbers.

The average breadth of the male is one hundredth part of an inch; and, on referring to the accompanying drawing (Fig. 1), it will be seen that it has a sharp, well-developed, spicule; and

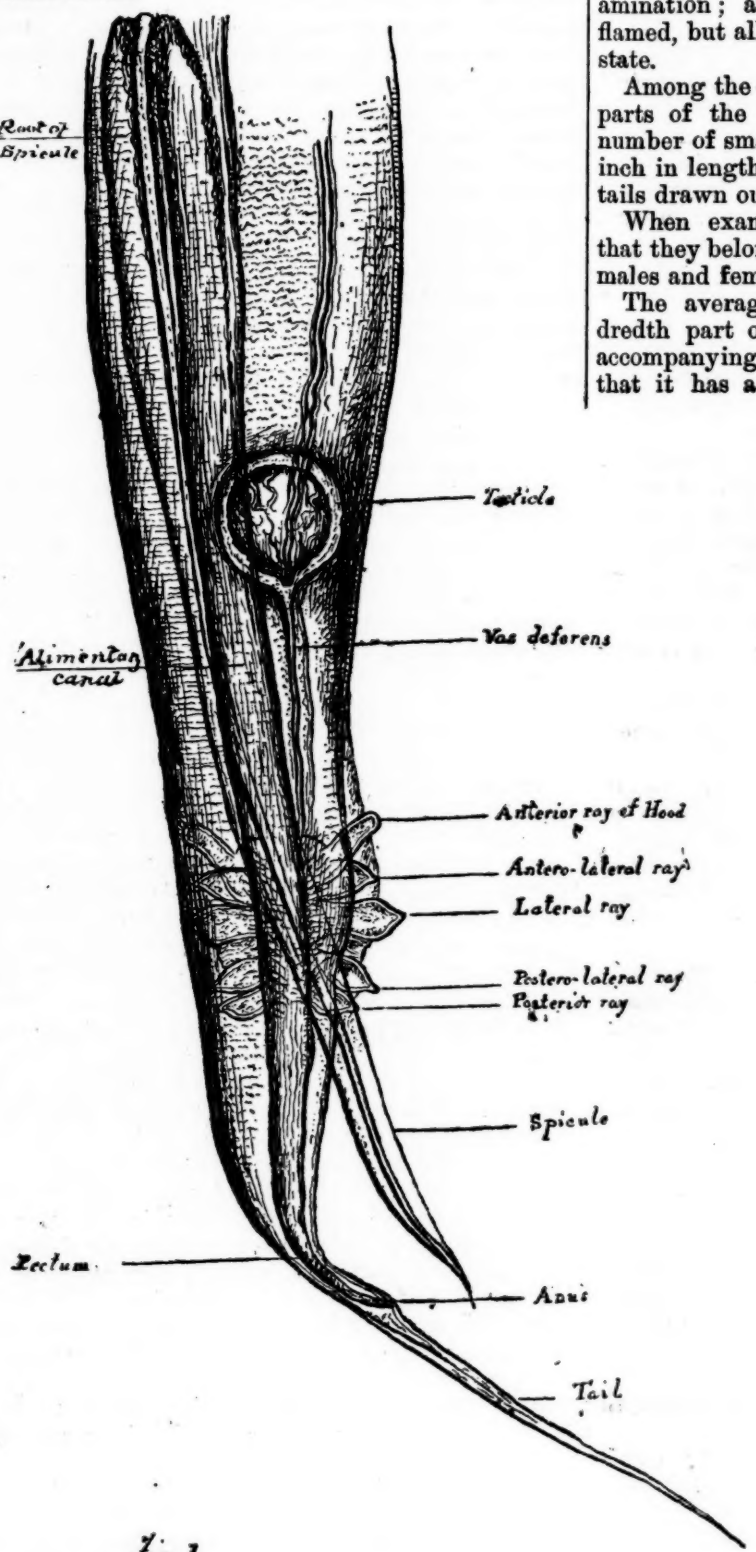

Fig. 1

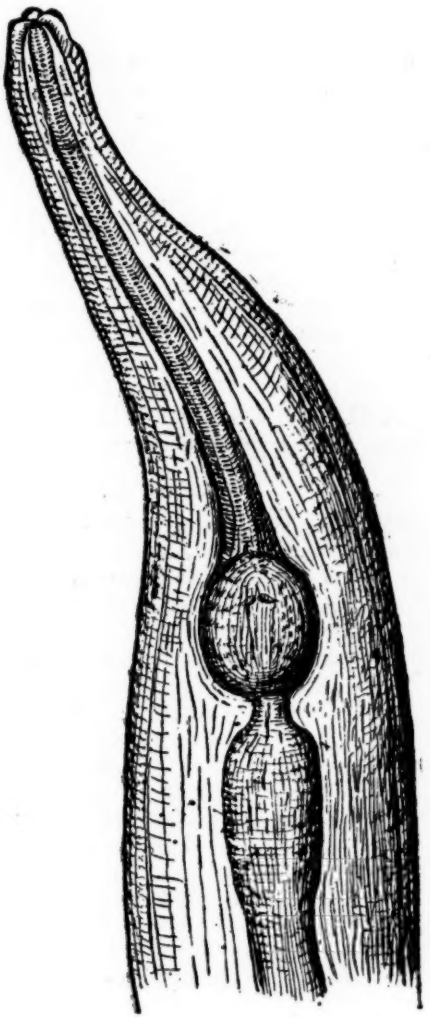

Fig. 2

also a characteristic hood, which organ enables the creature to embrace the female during the act of copulation.

This hood is bilobed, and both lobes present five symmetrically arranged rays, the lateral ones being the largest.

The female is about one eightieth part of an inch broad, and presents a convoluted uterus. In that organ a number of granular ova, averaging in length one four hundredth part of an inch and possessing distinct capsules, may be detected.

Three prominent lips surround the mouth of each parasite

The œsophagus (Fig. 2), which leads into a globular stomach, is composed of two layers of fibres, the outer being longitudinally and the inner circularly arranged.

The body is finely striated.

It must be remembered that these small helminths may be easily overlooked, since the dark-coloured viscid contents of the intestine closely adhere to them, and thus render their discovery somewhat difficult.

It may be remarked that none of the remaining fowls, upwards of forty in number, could be considered in a healthy condition; and, as it was deemed highly probable that their unthriftiness was due to the ravages of parasites similar to those described, the birds were removed to a fresh situation and treated by parasiticides, with a most successful result; thus proving that the subject is not without practical import.

It appears probable that the worms generally cause death by reflex irritation occasioning cerebro-spinal disturbance.

A HIND-LEG LAMENESS—INJURY TO FLEXOR METATARSI.

By W. Hunting, F.R.C.V.S.

I am inclined to think that the definite form of lameness I am about to refer to is more often seen than acknowleged. This may possibly be due to its not being recognised. I say this, not in disparagement of my brother practitioners, but because I failed to diagnose my first case and have since recognised two or three of a similar nature.

About three years ago Mr. Chas. Sheather showed me a case of lameness in his infirmary which presented a very peculiar symptom. When walked forward the off hind limb was raised with a jerky action and the tendon of the gastrocnemii was thrown into a loose fold. We were puzzled. The tendo-achilles was undoubtedly relaxed, from some cause, when the foot was raised, but it became tense again as soon as the foot reached the ground. We carefully examined the muscles and tendons at *the back* of the tibia, but failed to detect any soreness or structural alteration. Talking over the case we went into the house, when Mr. Sheather proposed to "look and see if 'Williams' gave any information on the subject." A careful look through the index and some pages of "Lameness affecting the hind limb" failed to afford us any satisfaction, but fortunately my friend caught sight of an illustration which immediately suggested we were on the right track. This drawing is to be found at page 297 of William's "Veterinary Surgery" second edition. It is described as follows:

"Figure 49 is from life, drawn by Professor Vaughan. The horse was a cart horse, very subject to rheumatic attacks for which he had been repeatedly treated. Towards the end of 1871, he was found one morning to be very lame and when he attempted to move, the near hind leg was thrown upwards and backwards with great violence; at the same time the tendo-achilles was seen to fall into a number of folds. The limb was swollen above and *in front* of the hock, midway between it and the patella. A post-mortem examination showed that the flexor metatarsi muscle was lacerated across at a point corresponding to the external swelling."

Thus guided we returned to the patient, and an examination of the muscle *in front* of the tibia showed that it was bruised and slightly swollen. Rest and local treatment effected a cure.

Without venturing to doubt the correctness of Professor Vaughan's sketch, I may say that I have never yet seen a case in which the muscle was so extensively lacerated, and therefore I have never seen a horse in which the limb assumed quite such a pronounced backward movement as he indicates.

Until one sees a case of this sort and follows the action of the limb it seems odd that a muscle *in front* of the tibia should, when injured, produce a definite, visible change *behind* that bone. Seeing a tendon relaxed into folds at once suggests some paralysis of the muscle attached to it. The mechanism by which this peculiarity is caused is, however, simple and clear.

We must remember that by the mechanical action of the tendinous portions of the flexor metatarsi in front of the tibia and of the flexor pedis behind it a parallel movement of the femur and metarsal bones is maintained, necessitating a constant relative motion of the stifle and hock joints. The various groups of muscles concerned in raising the limb, bending the hock and bringing the foot forward, act co-ordinately, and a rythmic movement is the result. When the flexor metatarsi is ruptured, or paralysed from any other cause, it fails to act—the result being that although the other muscles do effect an ascending and forward movement of the limb to some extent, the metatarsus is not flexed and the weight of the lower portion of the leg causes the foot to fall backwards. This moves forward the point of the os calcis, with the result that the tendo-achilles is relaxed. It may perhaps be clearer to say—the hock is raised, and the leg below swings backwards, or is even pulled forcibly backwards by the flexors of the foot, so that the tendo-achilles is relaxed by the os calcis being pushed forward.

Upon the amount of laceration of muscle existing in the flexor metatarsi depends the degree of over-extension of hock permitted. Complete rupture causing the limb to be thrown much further back-

ward than mere bruising, which, however, is itself sufficient to cause lameness accompanied by jerky action and relaxation of the tendo-achilles.

Professor Williams says: "This peculiar lameness is not always due to rupture of the flexor metatarsi *muscle*, it sometimes happens that its tendons of insertion become detached from the tarsal and metatarsal bones." To this I add that it may also arise from bruise, or at any rate from such slight subcutaneous laceration as not to be detectable, and not to necessitate more than a month, or at most two, of rest and treatment. In one case, which I saw with Mr. Mulvey, there was no evidence of injury on the muscle, but the inner and upper portion of the tibial region showed abrasion and bruising caused in an accidental collision. It is then an interesting question whether the nerve supplying the muscle may not sometimes be the injured structure and so cause the paralysis.

The cause seems to be always accidental; and has in my experience arisen from direct kick from another horse, from being run into by a vehicle, and in the "smash up" of a runaway.

IS THE VETERINARY PROFESSION DEGENERATING?

By John Henry Steel, F.R.C.V.S.

Degeneration is familiar to us all as change to a state of less efficiency. There can be no doubt that the Veterinary Profession is changing much, the question must be limited to: "Is that change for the worse"? If not the change must be of little value or a true progress; we can hardly be content with simply holding our own in the struggles of existence, it is our duty to progress. What are the outward and visible signs of professional change, and what are the inward qualities which they indicate?

I. *Public Recognition* is a palpable sign of a profession doing its duty. The following public recognitions of late years must be noted by the profession with satisfaction:—

(*a*). The passing of the Veterinary Surgeons Act.
(*b*). The establishment of an organised Civil Veterinary Department in England, and one in Ireland.
(*c*). Improvement in organisation and conditions of service in the Army Veterinary Department.
(*d*). Removal of certain disabilities, as non-presentation of Army Veterinary Surgeons at Court, non award of Decorations to Members of the profession, and so on.
(*e*). Several notable recent elections of Veterinary Surgeons to important civic posts.

II. *Recognition by the other professions and by learned bodies* is an indication of increased acknowledgement of scientific status and progress in the Veterinary Profession.

(*a*). The relations between the Medical and Veterinary Professions are daily becoming closer, they now meet on an even footing, the old spirit of patronage of the latter by the former is passing away, and signs of jealousy even are appearing in some quarters; the necessity for co-operation between the two professions is acknowledged by the leading men of both, and becoming a practical tie between them.
(*b*). The influence of Veterinary Surgeons on general scientific progress is beginning to be felt and acknowledged by various learned societies which have veterinary members.
(*c*). Members of the profession are beginning to make their way in various Universities.
(*d*). Science begins to look to the profession for solution of important general problems.

III. *Practical bodies of various kinds make a considerable demand for services of the profession:* —

(*a*). The Royal Agricultural Society has recently appointed local veterinary surgeons, the Agricultural Colleges have their respective veterinary professors; agriculturists appreciate our services.
(*b*). Numerous large companies employ their own veterinary surgeons, instead of resorting to contracts, or ordinary employment of private practitioners.
(*c*). The Houses of Parliament more frequently than previously call on the profession for evidence in enquiries concerning public health and animal wealth.
(*d*). Horse Breeding Committees and Societies call on the profession for opinions as to the subjects of soundness, hereditary influence, and so on.
(*e*). The Colonies are constantly demanding veterinary aid from the home profession.

IV. *Literature is at once an index and a guage of professional progress.*

(*a*). The periodical literature in the English tongue is now enormously in excess of any previous record, for there are three monthlies, three quarterlies, and one weekly organ of the profession.
(*b*). Students are better provided with text books.
(*c*). The profession is now provided with a number of special manuals on Obstetrics, Hygiene, Operative Surgery, and so on.
(*d*). Professional records indicate more refined means of diagnosis and of treatment than those of days gone by, e.g.: thermometry, use of the microscope, antiseptic surgery, and internal disinfection, intratracheal and subcutaneous injection of medicines, intralaryngeal surgery, and animal vaccination, are matters either established or under test which the profession of to-day may look on with satisfaction.
(*e*). The professional journals are prompt to show up professional abuses.

V. *Science in general has benefited by the labours of the veterinary profession* to an extent; and there are indications that it will do so more than now, when the energies of the profession are not, as now, considerably absorbed in its own development. Valuable bacteriological work has been and is being done by veterinary surgeons in Great Britain, America, and India; new medicinal agents are being introduced by the veterinary profession; valuable observations in zoology, comparative anatomy, hygiene, and other sciences are being made and recorded.

VI. *The Veterinary Profession is largely contributing to the welfare of mankind.*

1.—The arts of animal management are rapidly progressing under veterinary guidance, and while they tend to lessen disease can surely not be deemed indications of degeneracy of the Veterinary Profession! Neither do they lessen its work on the whole, but they expand the sphere of its influence. Diffusion of knowledge will not lessen employment of competent men; it is the ignorant who overestimate their own knowledge, and a professional man must be sadly wanting in confidence in his own opinion who will be at all biassed or restrained by possession of elementary veterinary knowledge by clients. Experience tends to show that we get less severe cases than formerly now-a-days because empiricism is less rampant, also that the worst cases we get are those which have been tampered with by their owners.

2.—Trade in live stock has derived enormous benefits from Veterinary Inspection, and it is admitted that many serious invasions of the British Isles by diseases of a formidable chasacter, *e.g.*, Variola Ovina and Rinderpest, have been prevented since the profession was charged with inspection of imported stock.

3—The art of war has benefitted by veterinary aid, for example, glanders never now hampers operations to a marked degree, whereas it formerly dismounted whole troops.

VII. There are some *miscellaneous signs of professional progress* which may be noted with satisfaction.

(*a*). We have the benefit of the uniportal system of admission to the profession.

(*b*). The various local Veterinary Medical Societies are satisfactory professional rallying centres.

(*c*). The National Veterinary Association and the Veterinary Benevolent Society usefully Co-ordinate these Societies.

(*d*). The profession takes an intelligent and active interest in the work of the R.C.V.S.

(*e*). There is a satisfactory tendency on the part of the profession to support its rights, to be independent of other professions on its Examining Boards and in its Professional Posts, and a sufficiency of competent men for special posts is available.

(*f*). The explored regions of veterinary knowledge are expanding in various directions:—

(1) Once the horse was our sole object of study, now we deal with almost all domesticated animals, and so lessen the range of empiricism.

(2) Our studies embrace many subsciences, (such as Toxicology, Therapeutics, Hygiéne), which formerly were imperfectly dealt with or ignored.

(3) America, Asia, Africa (north and south), and Australasia are now open to and being explored as to their veterinary bearings by English-speaking veterinarians.

(*g*). The practices of feeing grooms, combining horse dealing and other buisnesses with veterinary practice, and of underbidding brother professionals, are less frequent than formerly and rejected by the majority of members.

Thus we have numerous and cogent evidences of professional progress, which must lead us to be hopeful for the present and the future of the profession. Large fees are not less numerous, but there are a greater number of competent men than formerly to take them; ordinary fees are more numerous though they may not come in so freely to individual practitioners. Large practices have been broken up, but the aggregate amount of veterinary earnings and takings in a county is in excess of formerly, in spite of fall in prices and hard times in general. Keen competition exists, but its roughness and sharp points are rounded off by the influence of our Societies; flaring advertisements are often seen, but we doubt if more so than formerly, and certainly now they are more frequently held up to contempt, ridicule, and disgust. The tone of professional criticism is sound, though somewhat impregnated with incisive personalities.

It may be argued that public recognition of the profession as above detailed has not been accompanied by increase in those qualities of a body of scientific and practical men which elevate a profession. I consider such argument false. The mere fact of public recognition is strongly in favour of our improvement intrinsically, for "there is no smoke without fire." The spirit of search after truth has not been damped in us, we have more men than ever before devoting themselves to research in so far as practicable, we are keen to expose error, and we are not by any means slaves to authority—professional or otherwise. The useful quality of diligence in record of professional facts (although we have less time for it than our fathers had) is not extinct. The scope of professional study is broadening, fresh fields for work are opening before us, and we are not backward in occupying them. Diagnosis now-a-days, though more complex, is not less prompt than formerly, and thanks to the microscope and clinical thermometer is more exact and differential. Post-mortem examinations are now conducted with much care and thoroughness, and thanks to our numerous Associations, they are frequently recorded, and the specimens resulting are exhibited. No doubt much

valuable matter is lost, and many cases are not made to yield the utmost information for the profession, but this is in the very nature of things, and an evil to be minimised as much as possible, but which cannot to be eradicated. That zeal for professional welfare is not dead, the pages of our journals will show; there is occasianally a tendency to acrimonious personal discussion but it is usually met and allayed by dignified silence. Difference of professional opinion as shown in our law cases and at meetings is certainly not evidence of deterioration, the more science advances the more numerous are the possible ways of looking at professional questions, and many men will always have many minds. It is much better that individual professional opinion should be independent than that there should be a blind following of some leader who himself may ultimately be found to be groping in scientific darkness! Our practitioners are not less hard working, humane, honest, and useful than in days gone by, and they will stand comparison with men of any other profession. Our teaching bodies are successful, and meet the requirements of the profession. Our representative men are, if we consider relative numbers and the nature of duties in the general learned bodies, fairly well to the front, and trusted by the veterinary and general public as well as by Government. Finally, professional and general education has undoubtedly progressed as rapidly, if not more so, than instruction of the world in general.

We have examined the veterinary profession this day, and in our opinion it is "Sound."

31*st December*, 1888. J. H. S.

EXTENSIVE SARCOMA IN A COW.

By Sam Chambers, M.R.C.V.S., Kirkheaton.

On Sunday, November 4th, a client of mine sought my advice regarding a nice red and white cow which had had one calf. She had several lumps about her body which had gradually got larger for the last month or two, and had now begun to interfere with her health. I saw her a few times but gave no hope of recovery, she was therefore killed, and I made a post-mortem examination, as it was a new thing to me, but my father said he had seen a similar case a few years ago.

The post-mortem revealed a bad state of things, there being at least a wheelbarrow-full of Sarcomatous matter. It surprised me how the poor thing had lived so long. There were tumours protruding from both eyes, and the parotid and submaxillary regions were so enlarged as to interfere both with deglutition and respiration. There were subcutaneous tumours on both side over the levator humeri muscles and in the flanks. The udder also was enlarged, and tumours extended as high up as the vulva.

When she was cut down the middle there was not an organ clear, either in the thorax or abdomen, but the largest mass was in the uterus, it weighed about 9-lbs. The Sarcomatous matter resembled dirty fish both in colour and consistence.

I sent a portion to W. O. Williams, Esq., New Veterinary College, Edinboro', who made sections and pronounced it as a typical case of Round celled Sarcoma.

EXTRACTS.

ON TRANSFUSION OF BLOOD IN THE HORSE

in Diseases attended with Low Vital Action.

By Mr. James Farral,

V. S. to the Lord Leiutenant of Ireland.

During the autumn of 1856 and spring of 1857, an epidemic prevailed in and about Dublin, indeed, I believe all over Ireland, to a greater or less extent, which at its outset presented the leading features of influenza. but of a low typhoid character; it was much more prevalent along the eastern coast than on the western or in the Midland counties. In Dublin it was very fatal, and in most of the cases which I was called on to see, I found intense debility, which in some instances had come on a few hours after the disease had first manifested itself. Horses were seen to eat their food in the morning with every appearance of health and good spirits, and before evening they were found resting against the side of their stables for support; so rapidly had debility followed the first symptoms of the disease.

With all these cases, the principal difficulty was to support the strength, watching at the same time closely the symptoms which manifested themselves as the case progressed. Sometimes the urinary organs became affected, and repeated evacuations caused the patient to sink rapidly. In others the bowels were involved, and to such an extent as to resemble bad cases of cholera in the human subject; but the worst forms of this disease that I witnessed were those in which the animal had been bled previously to my having seen them. With those cases which had not been bled, I had, in treating them, an average amount of success; but in most of those that had, I am bound to admit that I was by no means so fortunate. I found that everything that I could do to restore the vital powers was, in the majority of cases, useless, and, save in the instance of a few young, vigorous horses, collapse set in within a few hours after the abstraction of the blood.

I gave a fair trial to all the usual remedies. In cases where influenza had assumed a typhoid form, and in which the leading symptoms were a feeble, thready pulse, quick and labored breathing, cold extremities, clammy mouth, drooping eyelids, utter prostration of strength, and, in short, the usual symptoms of collapse, especially such as had been reduced to this state by loss of blood, or by excessive purgation, I was generally unsuccessful. I determined to try the effect of 'transfusion,' believing it to be a not unnatural restorative, especially in cases where the improper abstraction

of blood had super-induced the symptoms above alluded to.

To enable me to give this operation a fair trial, I commenced a series of experiments, so as to discover the simplest, safest, and most effectual method of conveying blood from one animal to another."

The transfusion syringe was tried, but the results were not satisfactory, this he attributes to exposure of the blood to atmospheric air, by which it loses much of its vitality. After several experiments, an instrument was constructed, which, while it permitted the blood to flow freely from the vein of the healthy into that of the diseased animal, without exposure to atmospheric air, also maintained its temperature. The following is a description of this instrument, and the mode of using it :—

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Infected circles were adopted some years ago, when foot-and-mouth disease was prevalent, for the

purpose of preventing the movement of animals in the vicinity of an outbreak of disease. In practice the provisions, although in some cases rather oppressive in their action, worked well; and in the Contagious Diseases (Animals) Act of 1886, special powers were given to the Privy Council to declare infected circles in respect of any districts or generally, and in application to any disease of animals. Section 2 of the Act of 1886 works in the following manner:

When an inspector finds disease to exist in his district, he is required to make and sign a declaration thereof, and thereupon the place where the disease exists becomes an infected place, and a space of half a mile round the infected place becomes at the same time an infected circle, into, in, and out of which no cattle can be moved until the local authority grant the necessary licenses for movement. In short, the object of an infected circle is to stop all movement of cattle for a certain distance round an infected place, until the local authority have had an opportunity of ascertaining what the circumstances really are, so that they may act accordingly.

At first sight it will seem to the cattle dealer, and in some degree to the breeder and grazier, that he will suffer unmerited hardship by having his cattle shut up when they may be half a mile from a case of disease; but he will be comforted by reading that part of the order which gives the local authority power to contract, or even to dissolve the circle in their discretion. The circle, in fact, is an infected area of an elastic kind. Ordinarily, an infected area round an infected place is declared by the Privy Council, at the request of the local authority, who fix the boundaries of the area as they think best; but this procedure occupies several days, however promptly it may be carried out, and all the dangerous cattle outside an infected place may have been sent all over the country before the Order of Council comes into force. An infected circle is an area which is formed on the instant of the detection of disease, and all the restrictions which apply to area are at once in force, subject to the further action of the authorities after they have had an opportunity of becoming acquainted with all the conditions of the locality.—*The Field.*

PROSECUTION BY THE COLLEGE OF VETERINARY SURGECNS.

HEAVY PENALTY.

Mr. W. Chiswell, trading under the style of Chiswell and Co., of 123 New Road, Whitechapel, was summoned at the Thames Police Court yesterday, for being a person who, other than a person who for the time being was on the register of veterinary surgeons, or at the time of the passing of the Veterinary Surgeons Act held a veterinary certificate of the Highland and Agricultural Society of Scotland, did take or use the title of veterinary surgeon.—Mr. Colam prosecuted. In opening the case he said that by what the defendant did the public at large were deceived. He asked the magistrate to take the case as a serious one, and inflict an exemplary punishment.—Charles Davis, clerk to the solicitors of the Royal College of Veterinary Surgeons, produced the registers of England and Scotland, and said defendant's name did not appear in either of them. He had seen the board outside defendant's place, on which was "Chiswell and Co., M.R.C.V.S. Horses attended to." Defendant had been previously cautioned.—Defendant, in answer to the charge, said he had been in practice in London for the last thirty years, and could undertake anything in connection with a horse with anyone belonging to the College of Veterinary Surgeons. He had a partner, a Mr Sangster, who was a fully qualified man.—Mr. Lushington said defendant in 1881 might have put himself on the register, but did not choose to do so. It was clear his board led the public to believe he was a veterinary surgeon. Such a practice must be stopped. He would be fined £10, and £3 3s. costs.—*Daily News.*

GOVERNMENT VETY. DEPARTMENT.

CONTAGIOUS DISEASES IN ANIMALS.

Reported in Great Britain and Ireland in the week ending December 22nd, 1888.

Pleuro-pneumonia.—Only 4 fresh outbreaks of this disease were reported during the week, 1 in England in the county of Durham, and 3 in Scotland, 2 of which were in Edinburgh, and the other in Lanarkshire.

In England only 2 cattle were attacked in the counties of Durham and Kent, 3 were attacked in Scotland in the counties above named in which the fresh outbreaks occurred, The healthy cattle which had been exposed to infection were 17 in Essex, 1 in Kent, 5 in Worcester, and 10 in York (W. R.). In Ireland there was no fresh case of pleuro-pneumonia during the week: 18 healthy cattle exposed to infection were slaughtered.

Anthrax.—Of this affection 5 fresh outbreaks were reported in England, 1 in Lincoln (Holland), 1 in Northampton, and 3 in Somerset; in addition to these 1 was reported in Wigtonshire, in Scotland. There were 7 animals attacked by the disease in England, all of which died, the single animal affected in Scotland was killed. In Ireland 2 fresh outbreaks of this disease were reported: 1 in Wicklow, in which 4 animals were attacked and died; the other in Galway, where 1 animal was attacked and killed.

Swine-Fever.—There were 99 fresh outbreaks of this disease reported on in England and Wales during the week, only 2 of which were in the latter country in the counties of Carnarvon and Glamorgan.

This affection is very widely distributed through-

out England: the returns published in the *London Gazette* shows that in the week above referred to there were 32 English counties in which either fresh pigs were attacked or previously diseased ones to dispose of, but the immediate slaughter of the diseased swine seems to be the exception, for in no less than 20 of these counties diseased pigs remained alive when the return was made up. The disease is more prevalent at present in Oxfordshire than in any other county, the return for which supplies the explanation; of 71 infected places reported upon, 15 were fresh outbreaks, 249 diseased pigs remained alive; from the previous week 93 fresh ones were attacked: of these only 15 were killed. 74 died, and 253 were again left alive to spread the infection.

The total number of swine attacked during the week was 595, of which 297 were killed, 266 died, 27 recovered, and 573 were left alive when the return was made up.

There were only 5 fresh outbreaks of swine-fever reported in Ireland during the week in the counties of Waterford, Kilkenny, Longford, Queen's and Wicklow; 9 diseased swine remained alive from the previous week and 28 more became affected: of these diseased swine, 1 was killed, 22 died, 2 recovered, and twelve remained alive at the end of the week.

Glanders and Farcy,—In England 11 outbreaks of glanders were reported and 19 horses attacked. Of these outbreaks, 10 were in the Metropolis, and 1 in Lincoln (Lindsay); and of the horses attacked, 17 were in the Metropolis, 1 in Lincoln (Lindsey), and 1 in Surrey.

Of Farcy 11 fresh outbreaks were reported, 9 in the Metropolis, 1 in Lancashire, and 1 in Lanarkshire; 14 horses were attacked, 12 of which were in the Metropolis. Ireland had no cases of either glanders or farcy reported during the week.

Rabies.—There were 2 cases of this disease reported during the week in England, 1 was a horse in Hants., and the other a dog in Lancashire.

In Ireland 5 cases of rabies occurred, 3 in dogs in Down and Kerry, 1 head of cattle was attacked in Co. Down, and 1 donkey in Monaghan.

NOTES AND NEWS.

Freezing Milk.

Monsieur Guerin, an engineer, residing in the department of the Vosges, has just been presented with the gold medal of the French Society of Agriculture, for his valuable and successful experiments as to the desirability of freezing milk for transport. He was led to find out a process, and report on the results of his trials at the instance of a society of farmers, who were dissatisfied with the local market for their milk, but knew it was useless to attempt to compete with the dairymen nearer Paris, unless they could insure the freshness of their commodity on its arrival in the capital.

M. Guerin found that samples of milk from the same cows, one of which had been frozen, and the other perfectly fresh, could not be distinguished by a jury of twenty experts. Moreover, when boiled they behaved alike, and the cream of the frozen milk took no longer to rise. The frozen milk remained perfectly sweet for four days, and made excellent butter. He submitted samples to the leading cheese factories, and they also reported favourably upon it. The chief precaution that it seems necessary to take is not to allow the milk to remain at any time at a temperature higher than thirty-five degrees Fahrenheit. The process of freezing is completed in five or six hours.—*Echo*.

Pathological Investigations by the R.C.V.S.

During the year important investigations have been conducted, under the direction of the Principal of the Royal Veterinary College, into the diseases of cattle. sheep, and swine. The result of these inquiries will be included in the Annual Report from the Royal Veterinary College, to be published in the Journal. The following diseases have been experimentally investigated during the year: Tuberculosis, specially as affecting dairy cows; actinomycosis, commonly known as "wens" in cattle; anthrax, specially as it occurs in swine: and the eruptive disease of the udders of cows, which, in its alleged connection with scarlatina in man, has for the last two years attracted the special attention of owners of stock.

Unqualified Assistants and "Covering."

In March, a memorandum for the information of medical practitioners in regard to the employment of unqualified assistants was issued; it stated specifically that any registered practitioner who employed an unqualified assitant, either in complete substitution of his own services, or under circumstances in which due personal control and supervision were or could not be exercised, would render himself liable to the censure of the Council. The procedure known as "covering," was defined in this memorandum to be any course of conduct which enabled an unqualified person to practice as though he were qualified. It was clearly indicated that the condemnation of the employment of unqualified assistants was not intended to apply to the case of the genuine use, whether of pupils or others whose services might be employed under proper supervision in treating the sick or injured. On May 24th, a registered practitioner who, after his case had been investigated at some length, admitted that he had erred by acting as cover for an unregistered practitioner, and apologised, was publicly admonished by the President. The warnings given on this and a previous occasion being considered apparently inadequate, the Council, at its session in November, removed from the *Register* the names of two registered practitioners severally proved to have acted as "covers" to unqualified practitioners.—*British Medical Journal*.

CORRESPONDENCE.

Communications for the Editor to be addressed 20 Fulham Road, S.W.

Original articles and reports should be written on one side only of the paper, and authenticated by the names and addresses of the writers, not necessarily for publication.

We shall be obliged by early intelligence of all matters worth bringing under the notice of the profession, and thankful to any friends who may send us cuttings from local papers, containing facts of interest.

SIR,

I was much interested on reading Editorial last week anent the difference there appears to be now, and formerly, of acquiring anatomical knowledge at school. When I became a student, not many weeks passed before I was, with others, engaged in the dissecting room, and this continued at intervals up to a short time previous to going up for examination. Reading anatomy was scarcely thought of, and as to illustrations, I don't remember meeting with any in books. Percival was our mentor. I have always been of opinion that anatomy can only be learned by dissection. In my time, there were no prizes offered to students—I look upon them as bribes. Cramming was *not known*. A student worked upon his merits so as to obtain the diploma when the time was up. The present systems of education, *not Veterinary in particular*—but all others, are, I think, not without objection. Competitive examinations are getting into disfavour, at least, I read as much. Theory is good, but practice is better, and when united there is no doubt of results.

R. H. DYER.

ROARING IN HORSES.

SIR,

Your review of Mr. Cotterell's little book on Roaring in Horses seems to have offended that gentleman. To show that you were wrong in saying his operation was "a plagiarism on that of Dr. Fleming" he has written to *The Field* and drawn the following from the Dr.—a reply which may interest some of your readers.

V. S.

"SIR,—As Mr. Cotterell alludes to me in *The Field* of the 22nd inst. on the above subject, I will ask you to kindly give me the opportunity of replying to him. In June last I received a letter from that gentleman, in which he proposed that, if I would tell him what my operation for roaring was, he would inform me as to his. I did not venture to reply to him, as I considered an answer was not necessary under the circumstances. He now states that he first operated upon a horse in January, 1888, six months before I proposed mine. I do not know what warrant he has for making such a statement, but it is certainly entirely unfounded. More than ten years ago I satisfied myself as to the practicability and safety of intra-laryngeal operation for roaring, and during that period have repeatedly demonstrated the *rationale* and mode of procedure. Even in the month of January, when Mr. Cotterell says he first operated, Mr. Smith, of the Army Veterinary School, Aldershot, under my direction and in my presence, operated upon two horses.

I have read Mr. Cotterell's amusing, if somewhat mystifying, pamphlet on roaring, and can find no reliable or acceptable evidence therein that he has succeeded in what he asserts he has. The only case he gives is that of a young horse belonging to a dealer (though whether it was affected there is no proof): on this animal he performed his operation, and a month afterwards, when he went to enquire how it was getting on, he was informed by the dealer that it had been sold to another dealer, who did not discover that it was a roarer. On this evidence your correspondent bases his radical cure, and publishes his *magnum opus*. So far as I can understand it, his operation will not cure this serious defect: and, so far as my experience goes, if it affords any relief at all, this will only be temporary, and will leave the state of the horse worse than before.

I have hesitated publishing the results of the operations I have had performed under my direction until I could perfectly satisfy myself as to the permanent success of the results; these I hope to make known within the next month. I have been endeavouring to simplify the operative procedure and ensure the safety of the operation as much as possible, and many months' experience has allowed this to be most successfully accomplished. Nearly seventy bad cases have been operated upon without a single mishap or accident of any kind, though all were completely narcotised by chloroform, the knowledge of the effective and economical use of which has been promoted in a striking manner by these numerous operations. As an instance of the remarkable dexterity of the operator, the simplicity to which the operation has been reduced, and the promptness with which thorough narcotism can be effected by a small quantity of chloroform administered by the new method, I may mention that recently a horse was thrown down, made insensible by 2oz. of chloroform (in some cases 1½oz. is quite sufficient), the larynx opened, and the parts to be excised removed, the whole business only occupying five minutes, though ten minutes is the usual time."

GEORGE FLEMING.

London, Dec. 26.

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